MITSUBISHI MOTOR SALES OF AMERICA, Inc.

TECHNICAL SERVICE BULLETIN

SUBJECT:

VALVE NOISE AT START-UP

NO. TSB-95-11-001

DATE November, 1995

MODEL V6 and DOHC Models

BACKGROUND INFORMATION

On V6 and DOHC models, it is normal to hear a valve noise (a "ticking" sound) during the first two minutes after engine start-up. However, vehicles that are overdue for oil change or have not been started for a long period of time may experience the noise for longer than two minutes. The noise is caused by air in the high pressure chamber inside the automatic valve lash adjusters.

Replacing valve lash adjusters will probably **not** eliminate valve noise. This bulletin contains procedures to bleed air out of the adjusters and to confirm that the adjusters do not require replacement.

NOTE: For Eclipse models with 420A engine, refer to the "Lash Adjuster Check" on page 11C-12 in the 1996 Eclipse service manual. Do not perform the procedures in this bulletin.

VEHICLES AFFECTED

All V6 and DOHC models

PROCEDURE

If valve noise (a "ticking" sound) lasts more than two minutes after engine start-up, perform the following steps in order:

1. Check the engine oil level and quality, and correct as necessary. Start the engine. If the valve noise continues for longer than two minutes after start-up, continue with Step 2 below.

2. Warm the engine to normal operating temperature. Increase idle speed gradually to 3,000 rpm, then back down to normal idle speed. Repeat this process several times (maximum of ten times). If the valve noise continues, stop the engine. Inspect the automatic valve lash adjusters as described in Steps 3 and 4 below.

   CAUTION: Wear protective gloves and use care to protect yourself from hot engine components.

3. Remove the oil cap on the rocker cover and listen for the source of the noise. If it seems to be coming from the valve lash adjusters, proceed to Step 4. Otherwise, refer to section 11 of the appropriate service manual for further engine diagnosis to determine the cause of the noise.

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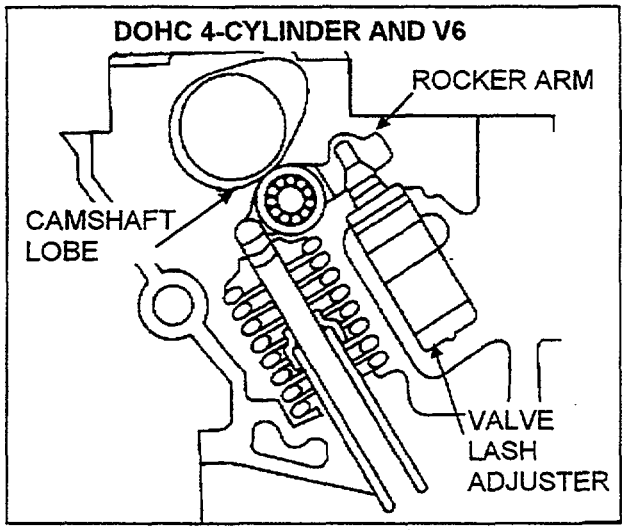
4. Remove the rocker cover.

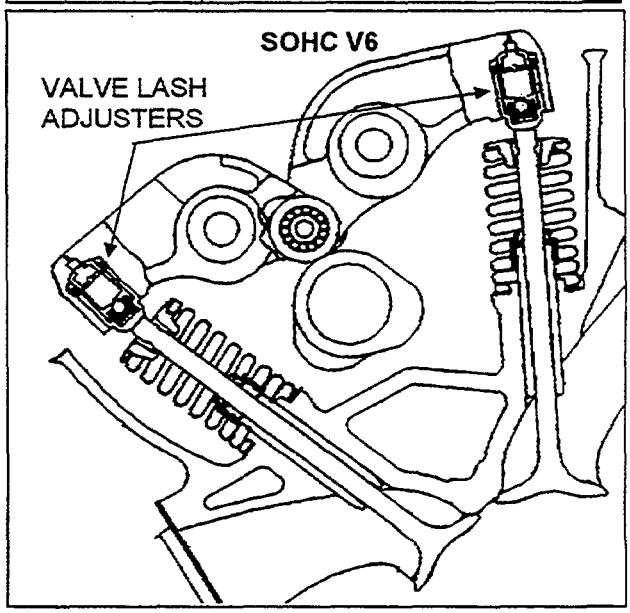
5. Using finger pressure, push down on the rocker arm over the head of each valve lash adjuster.

   NOTE: Be sure that the camshaft lobe is on the flat side when performing this step.

   a. If the head of the adjuster sinks when finger pressure is applied, the adjuster must be replaced.

   b. If the head of the adjuster stays firm when finger pressure is applied, the adjuster is operating normally. Do not replace the adjuster. Refer to section 11 of the appropriate service manual for further engine diagnosis to determine the cause of the noise.





WARRANTY INFORMATION

Valve Lash Adjuster Inspection (All)

Nature Code: 80B *Cause Code:* 220
Labor Operation Number: 11321500 *Time Allowance:* 0.3 hrs.
Warranty Coverage: 36 months/36,000 miles if not related to owner maintenance.
Special Warranty Information:

- Use labor operation number 11131000 for rocker cover removal and reinstallation. (0.2 hrs. per cover, i.e., V6 = 0.4 hrs., 4 cylinder = 0.2 hrs.)
- Perform only when due to customer complaint and after attempt to determine if due to lack of maintenance (i.e., overdue oil changes). If due to lack of maintenance, advise customer that condition is their responsibility. Advise customer that a ticking noise for a short time during warm-up is normal.

Produced by the MMSA Technical Information Department.

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